

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

KENNETH J. WEGER,)
)
)
Plaintiff,))
)
)
v.) No. 13 C 6188
)
DYSON, INC.,)
)
Defendant.)

OPINION AND ORDER

This is an action arising under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, and under the Declaratory Judgment Act, 28 U.S.C. §§ 2201-02. Plaintiff Kenneth J. Weger seeks damages for infringement of U.S. Patent No. 5,794,305 ("the '305 patent"), issued August 18, 1998, that patents an articulation device that pivots the movement of a vacuum cleaner either to the right or to the left. Weger claims that sales by defendant Dyson, Inc. of its DC 40, 41, and 50 model vacuum cleaners (the "accused models") infringe the '305 patent claims. Dyson seeks a declaratory judgment that the patent is not infringed.

The court has jurisdiction of the subject matter and of the parties.

The case is before the court on Dyson's motion for summary judgment of noninfringement. Infringement is a question of fact. Summary judgment of noninfringement may be granted only when there exists no genuine issue of material fact, and the movant is entitled to judgment as a matter of law. *Fujitsu Ltd. v. Netgear Inc*, 620 F.3d 1321, 1325 (Fed. Cir. 2010); *Kustom Signals, Inc. v. Applied Concepts Inc.*, 264 F.3d 1326, 1332 (Fed. Cir. 2001).

Determining whether an accused device infringes a patent is a two-step inquiry. *Terlep v. Brinkmann Corp.*, 418 F.3d 1379, 1381 (Fed. Cir. 2005). The court must first construe any disputed terms or disputed limitations in the asserted claims. Claim construction is a matter of law. *Id.* at 1381-82; *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). Next, the court compares the properly construed claim to the accused device to determine whether all of the claim limitations are present in the device either literally or under the doctrine of equivalents. *Terlep*, 418 F.3d at 1381; *Innovation Toys, LLC v. MGA Entm't, Inc.*, 637 F.3d 1314, 1318-19 (Fed. Cir. 2011).

Claims are given their ordinary and customary meaning, which is the meaning the words would have for a person of ordinary skill in the art. Such meaning may be readily apparent to lay judges and claim construction in such cases involves the application of the widely accepted meaning of commonly

understood words. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-14 (Fed. Cir. 2005) (en banc).

The '305 patent states that the "invention relates generally to upright vacuum cleaners, and more specifically to a mechanism for steering and articulating a vacuum cleaner or other wheeled device," by which it may easily be turned to the right or to the left. '305 Pat. col. 1, ll. 6-8.

The '305 patent contains two independent claims, 1 and 13, and eleven dependent claims, 2 through 12. Claim 1 is exemplary. The dependent claims incorporate every limitation of claim 1. Claim 1 provides:

1. A vacuum cleaner having improved maneuverability for moving over a surface, the vacuum cleaner comprising:

a base portion including
spaced forward wheels having a forward axis,
a pair of hemispherically shaped rearward wheels
having a rear axis, and

a base member coupling the forward wheels and
the rearward wheels such that the rear axis is pivotable
in a plane generally perpendicular to the surface, only
one of the rearward wheels being disposed on the
surface when the rear axis is pivoted from a generally
horizontal position; and

an upright portion coupled to the rearward wheels for
pivoting the rear axis in the plane generally
perpendicular to the surface, whereby the vacuum
cleaner may be caused to move in a generally straight
direction when both of the rearward wheels are

disposed on the surface, and the vacuum cleaner may be caused to turn when the rear axis is pivoted from a generally horizontal position and only one rear wheel is disposed on the surface.

'305 Pat., col. 5, ll. 9-30.

In 2005, Dyson filed a complaint against Weger seeking a declaratory judgment that Dyson's use, sale, offer for sale, and importation of its DC15 model vacuum cleaner did not infringe the '305 patent. *See Dyson, Inc. v. Weger*, No. 05 C 2268 (N.D. Ill.). Summary judgment of noninfringement was entered by the district court and affirmed without an opinion. *Dyson, Inc. v. Weger*, No. 05 C 2268 (N.D. Ill. Nov. 3, 2005) (Docket Entry 41) ("*Dyson I*"), *aff'd*, 194 F. App'x 917 (Fed. Sept. 7, 2006) (summary affirmation).

In the prior **Dyson** case , the court construed the term "a pair of hemispherically shaped rearward wheels." It was held that there could be no infringement because the barrel-shaped DC 15 model did not have a "pair of hemispherically shaped rearward wheels." The court stated that "the rearward wheel at issue neither is a 'pair,' nor is 'hemispherically shaped.' Plaintiff's [Dyson's] vacuum cleaner contains a single, barrel-shaped rearward wheel. Essentially, defendant [Weger] is arguing that plaintiff's single wheel should be

considered to be a 'pair' of wheels because it could be cut into two pieces." The court rejected this construction. *Dyson I*, at 5.

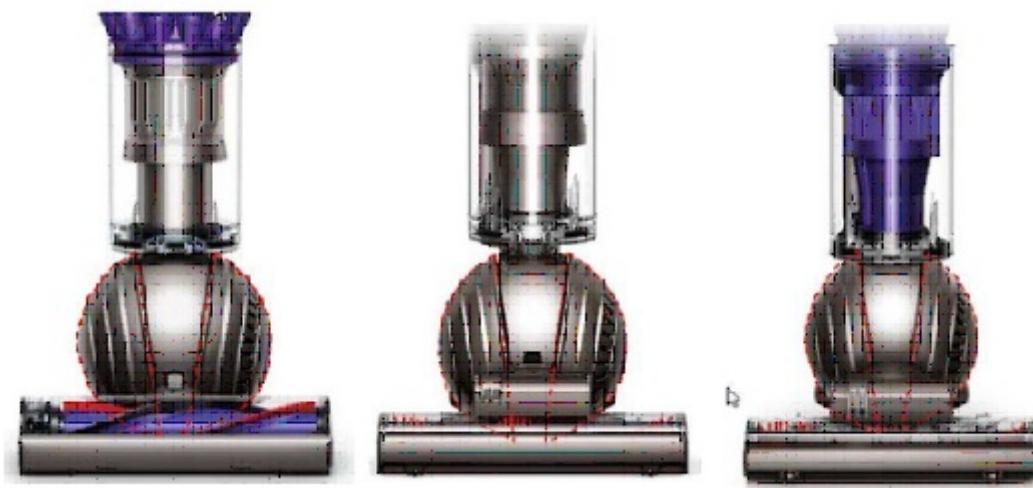


Id. at 2 (depictions of Dyson Model DC15)

The accused models in the present case differ from the DC 15 model in important respects.



Def. Exh. 10 (Docket Entry 23-11).



Def. Stmt. of Facts ¶ 47 (DC50, DC40, DC41).

The accused models operate with two (a pair of) rotating outer shells separated and connected to a U-shaped stationary wedge. The rotating outer shells provide motion and a pivoting capability that allow right or left movement when the cleaner is tilted. There is sufficient difference in the accused models and the DC 15 model to preclude direct application of the holdings in the **Dyson** case to this case. However the construction of the patent insofar as it may be applicable, is binding on the parties and the court.

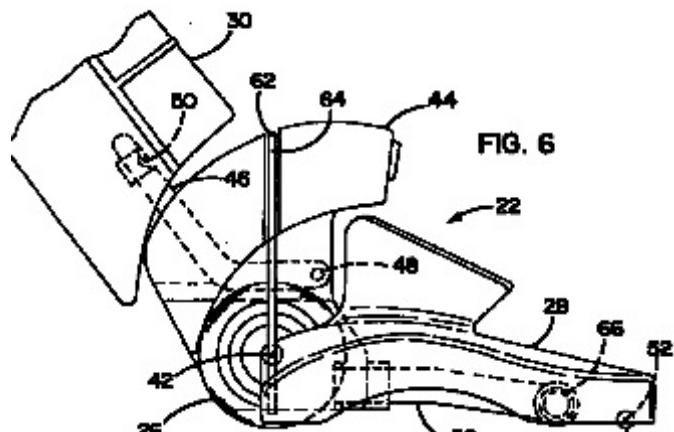
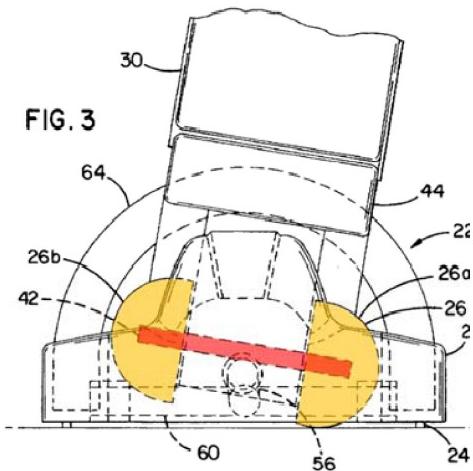
Dyson argues that because the accused models do not have perfectly-shaped hemispheric outer shells that they do not infringe the '305 patent. Dyson does not deny that the accused models have a "pair" of shells. Judge Lindberg's opinion cannot be read as holding directly or by implication that the '305 patent wheels must be construed to specify shape-perfect hemispheres. Moreover, the Federal Circuit most recently has not required mathematic precision in defining shapes. *See DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.* 469 F.3d 1005, 1018-19 (Fed. Cir. 2006) (district court erred in concluding that no reasonable jury could find that a conically shaped portion of an accused device was equivalent to a spherically shaped limitation). *But compare Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1158-60 (Fed. Cir. 1998) (spherical cup not proved

to be equivalent of an artificial, hip-socket patent in which the written description referred only to a conical shape) (distinguished in *DePuy*, 469 F.3d at 1019-20).

Here the basic shapes of the shells which operate as wheels are comparable with the shapes of the hemispheric wheels described in claim 1. The curvature differences are not great. The fact that the outer shells of the accused models are not each exactly one-half of a perfect sphere does not defeat the possible application of claim 1. A jury could find that the pair of shells on the accused models are hemispherically-shaped and so are within the limitation of claim 1.

Dyson also contends that claim 1 must be construed to define as a limitation a "rear axis" that is a single, physical, rod-like structure to which both wheels are attached and about which they rotate. Dyson relies in part on figures contained in the patent, which label the rear axis as "42." Each rear wheel of the Dyson models, however, is connected to a U-shaped structure by a nub and is inclined to the floor at an 8-degree angle. The nubs supporting the wheels are inclined to one another at an angle of 16 degrees and do not meet. They are not collinear with one-another. There is no single axis shared by the two shells. Each has its own distinct axis of rotation.

Dyson point out that, every '305 patent figure where the "rear axis 42" is shown, depicts the rear axis as a singular, physical, rod-like structure that supports a pair of wheels. Claims 5 and 6 each describe a "rearward wheel housing [being] coupled to the rear axis." Claims 8 and 9 specify that a member will be "rotatably couple[d]" to the rear axis.



Weger responds that an axis is not required to be a physical structure. He points out that claim 1 refers to "spaced forward wheels having a forward axis," but the front wheels as shown in the patent are not necessarily connected by a physical axis, for example 24 and 52 as shown in Figure 7. Weger argues that this position is supported by common usage, citing Merriam-Webster's Collegiate

Dictionary (10th ed. 1993) ("axis: a straight line about which a body or geometric figure rotates or may be supposed to rotate").

It is argued that the axis may be a single, imaginary line connecting the wheels as emphasized by the role the rear axis plays in the invention. The rear axis is pivotable in a plane "generally perpendicular to the surface." The specification discloses that the reason is to facilitate turning, and this is what happens with Dyson's shells. The rear axis pivots on a the plane generally perpendicular to the floor.

Although it is possible for an axis to be an imaginary line, as in the case of the "forward wheels having a forward axis," here the intrinsic evidence of connections found in the patent claims establishes that "the rearward axis [42]" described in claim 1 is a single physical rod-like structure.

With the rearward axis construction of claim 1 construed as a physical structure, a jury could find no literal infringement of the claim, but there are disputed facts which preclude a finding of no equivalent infringement.

Accused products that may be found not to literally infringe a claim of a patent may still infringe under the doctrine of equivalents if each element of the claim is met either literally or equivalently. *Cybor Corp v. FAS Techs., Inc.*, 138 F.3d 1448, 1459 (Fed. Cir. 1998).

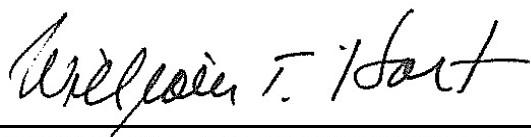
Weger states in his declaration:

17. At a minimum, the hemispherically curved shaped rearward wheels and U-shaped, unitary mounting structure perform substantially the same function as hemispherically shaped rearward wheels with a rear axis because that accused structure provides the ability to have one rearward wheel on the floor and the other off the floor when turning. That accused structure performs the function in substantially the same way as the hemispherically shaped rearward wheels with a rear axis because the shape of the rearward wheels and the U-shaped, unitary mounting structure allow a rearward wheel, when turning, to follow the curvature of the wheel to effectuate the tilting of one rearward wheel relative to the other. Finally, substantially the same result is achieved because the hemispherically curved rearward wheels and unitary, U- shaped mounting structure allow the vacuum cleaner to turn more easily and at a tighter angle than if the wheels had no curvature and were not connected such that the wheels can tilt relative to one another about an axis.

A determination of equivalents is a question of fact. *DePuy*, 469 F.3d at 1013. If it can be shown, as contended by Weger, that only insubstantial differences distinguish any missing claim element, such as a physical structure rear axis, from the corresponding aspect of the accused devices, and the accused devices function in substantially the same way with substituted mechanisms to achieve substantially the same result as the '305 claims, it could be found by a jury that the accused products infringe under the doctrine of equivalents. The fact issues in this case preclude summary judgment.

IT IS THEREFORE ORDERED that defendant's motion for summary judgment [21] is denied. A status hearing will be held on June 12, 2014 at 2:00 p.m.

ENTER:



UNITED STATES DISTRICT JUDGE

DATED: MAY 29, 2014